

APPENDIX XXI:

**DRAFT FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS ANNEX
(FWSEA)
TO THE FEDERAL REGION 9 REGIONAL CONTINGENCY PLAN**

Note: This draft FWSEA was prepared in October 2005 by the U.S. Department of the Interior, Office of Environmental Policy and Compliance, Region 9 (OEPC). It is under review by the Regional Response Team Natural Resources Subcommittee, chaired by OEPC, and, in particular, the U.S. Fish and Wildlife Service (FWS), Regions 1 & 2; the National Oceanographic and Atmospheric Administration, National Marine Fisheries Service; and the State of California Office of Spill Prevention and Response. This draft has not been reviewed by FWS field offices and is not intended for official use.

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1.0 PURPOSE

The purpose of this Fish and Wildlife and Sensitive Environments Annex (FWSEA, or "Annex") is to provide On Scene-Coordinators (OSCs) in U.S. Environmental Protection Agency (USEPA or EPA) Region 9 with the information needed to: (a) identify and prioritize protection of fish and wildlife resources and sensitive environments, (b) contact natural resources trustees and managers, and (c) provide guidance in selecting appropriate response strategies for minimizing the adverse ecological effects of a spill, including the impacts associated with response activities. This Annex establishes procedures and policy for meeting the objectives set forth in 40 Code of Federal Regulations (CFR) Section 300.210(c)(4)(i) and 40 CFR Section 300.210(c)(4)(ii) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This Annex is not intended to be an all inclusive technical guide for reducing or eliminating all adverse affects to natural resources. This Annex should be used in conjunction with both the Sensitive Site Strategies in Region 9 Area or Sub-area Contingency Plans (ACPs) and the National Oceanographic and Atmospheric Administration (NOAA) Coastal Environmental Sensitivity Indices (ESIs) available on CD or at <http://www.uscg.mil/d11/m/rrt9web/>.

2.0 SCOPE

This Annex complements the ACPs and ESIs that provide geographic locations and distributions of resources and iconic information of sensitive areas in Region 9. Additional information to assist the OSC in the sensitive environment classification and identification process is also included. This Annex addresses response techniques and consultation processes to facilitate coordination and consideration of potential environmental impacts during spill response. Information contained in this Annex coupled with the ACPs and ESIs will aid responders in identifying and minimizing ecological impacts of a spill in various environments and habitats. This Annex provides a regional perspective to aid the Area and Sub-Area Committees in identifying special areas of concern requiring specific consideration during response planning.

3.0 OBJECTIVES

The NCP, at 40 CFR §300.210(c)(4)(ii), delineates nine objectives for fish and wildlife and sensitive environments annexes. This Annex addresses each of the nine NCP objectives which have been collapsed into the following four subject areas for quick reference:

3.1 Identify and Establish Priorities for Resources at Risk

Fish and wildlife resources, other sensitive resources, and appropriate resource trustees and managers are identified. Agencies to be notified and consulted in establishing incident-specific priorities for the protection of these resources are provided. Fish and wildlife and sensitive resources identified include: threatened

and endangered species and their designated critical habitats, environmentally sensitive lands, freshwater environments, and areas of economic significance (see Section 4.0).

3.2 Determine Environmental Effects of Response Actions

The probable impacts of various response methods on general environments and habitats are provided. Methods for determining and approving the appropriate response techniques for specific environments and habitats and for monitoring the effectiveness of response activities are outlined (see Section 5.0).

3.3 Identify Fish and Wildlife Response Capabilities

State and Federal response capabilities and initial personnel contacts for spill response assistance and wildlife rescue and rehabilitation are outlined. Acquiring and pre-positioning of appropriate response equipment, personnel and mutual aid agreements and Occupational Safety and Health Administration (OSHA) training requirements for volunteers assigned to fish and wildlife rescue and rehabilitation are also discussed (see Section 6.0).

3.4 Evaluate the Interface of the FWSEA with Non-Federal Plans

The compatibility of this Annex with non-Federal response plans on issues affecting fish, wildlife, their habitats and sensitive environments is evaluated (see Section 7.0).

4.0 IDENTIFICATION AND PRIORITIZATION OF RESOURCES AT RISK

To ensure that appropriate steps are taken to minimize the overall impacts of an oil discharge on ecological and economic resources, the Responsible Party must be aware of sensitive environments and important resource areas in their chosen transportation route. The purpose of this Section is to identify sensitive areas **before** a spill event occurs. Environmentally sensitive areas are identified in the ACPs Sensitive Site Strategies and the NOAA Coastal Environmental Sensitivity Indices.

4.1 Notification of Natural Resource Trustees and Natural Resource Managers

As required by the National Contingency Plan (NCP), following notification of a spill, the On-Scene Coordinator (OSC) shall notify the relevant Federal, State, or Tribal natural resource trustees and managers. Prompt notification of, and consultation with, natural resource trustee contacts and other natural resource management agencies is imperative so that their expertise can be utilized in identifying and protecting sensitive environments. Only one contact per agency should be necessary, as the persons initially contacted are responsible for notifying other critical personnel within their respective agencies. Natural resource trustees and managers will provide the OSC with information concerning the presence of trust or important natural resources, as well as technical assistance concerning impacts or potential impacts to those resources.

Pursuant to Subpart G of the NCP, the following officials and agencies have been designated trustees for natural resources and their supporting ecosystems in EPA Region 9: Secretary of Commerce; Secretary of the Interior; Secretary of Defense; Secretary of Energy; and, Secretary of Agriculture; State Trustees; Native American Tribes; and Foreign Trustees. Attachment 1 contains a roster of current members of the standing Regional Response Team (RRT) and **Appendix** of the Regional Contingency Plan (RCP) contains a list of contacts for Federally-recognized Native American Tribes in Region 9.

4.2 Consultation with Natural Resource Trustees and Natural Resource Managers

When a spill occurs, impacts to the ecosystem are usually unavoidable. However, such impacts can be minimized through proper planning and coordination with State, Federal, Tribal, and/or foreign natural resource trustees and managers both before and during a spill. Co-trusteeship for migratory birds and threatened and endangered species within Region 9 is shared by the USFWS and States. States are sole trustees for resident (non-migratory) fish and wildlife. Indian tribes are trustees for the natural resources, including their supporting ecosystems, belonging to, managed by, controlled by, or appertaining to the tribe.

Consultation and coordination with natural resource trustees and managers during the pre-spill planning phase aids in identifying and understanding potential natural resource concerns and issues as a result of spills in general. Consultation and coordination during a spill is also essential to ensure that site-specific resource concerns are addressed. In addition to the designated natural resource trustees, there are other Federal and State agencies and Tribal organizations with land and resource management responsibilities and expertise which need to be consulted regarding response actions. The USFWS can provide responders with information concerning the presence of trust natural resources, as well as technical assistance concerning the effects of oil and response actions on these resources.

4.3 Prioritization

Considering the diversity and extent of sensitive natural resources in Region 9, it is important to reach a consensus, to the extent possible, on the highest resource priorities in order to provide for time-sensitive, coordinated, and effective protection, rescue, and restoration. Although prioritization is difficult, several criteria that may be used in making this determination have been identified:

- relative abundance or scarcity of a particular resource;
- relative diversity and abundance of resources at a particular site;
- fecundity (productivity) of biological resources;
- vulnerability to spills;
- toxicity of the product discharged;
- amenability to product recovery and restoration;

- protection by Federal and State laws; and
- economic importance.

The locations of environmentally sensitive areas are identified by Area and Sub-area Committees as part of their spill planning process. The contingency plans for each area and sub-area provide an excellent overview of sensitive areas and should be referenced early in the spill response. Knowledge of these areas may need to be refined or augmented during an actual spill. The NOAA ESIs provide a compilation of information for California coastal shoreline sensitivity, biological resources and human-use resources in order to identify sensitive resources before a spill occurs so that protection priorities may be established. Additional sources of information about environmentally sensitive areas may include commercially available local maps and State atlases, National Wetland Inventory maps, U.S. Geological Survey quadrangle maps, maps developed by the Area and Sub-Area Committees, maps and information developed as part of facilities plans, maps and information developed by various government agencies, and computer Geographic Information System (GIS) information. OSCs may also refer to <http://www.uscg.mil/d11/m/rrt9web/> to find GIS data. The website contains an array of data, for example the NOAA Coastal Environmental Sensitivity Index Atlases and USFWS designated critical habitat websites for Region 9.

4.3.1 Threatened and Endangered Species

In the event of an oil spill or hazardous substance release, the Endangered Species Act (ESA) [50 CFR 402.2] must be considered in the development of Federal response activities and actions during an oil spill response by federal agencies or agencies that are acting for or under a federal agency. As the spill response occurs, the OSC must consult with the natural resource trustees as laid out in Section V.B of the *Inter-agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act* (ESA MOA) (Attachment 7).

Threatened and endangered species inhabit nearly every county in Region 9. USFWS Field Offices maintain an updated list of threatened and endangered species by county that is revised when species are added or removed. Such information is made available to other agencies and the public.

Natural resource trustees, managers or other contacts are identified in Attachment 1, which also contains the phone numbers for contacts who should be notified and consulted. Attachment 3 provides links to State and County lists of federally listed threatened, endangered and proposed species in Region 9.

4.3.3 Recreational Areas

Tourism and recreation may be impacted as a result of a spill, with restrictions or potential closures of important fishing streams, boating and canoeing areas, beaches and other recreational amenities (e.g., marinas, boat launch sites)

associated with the Region's rivers and lakes. Identifying and protecting these recreational resources should be considered during planning and response actions. Developing timely response procedures to notify, inform and accommodate potentially impacted recreational users will help minimize the disruption.

5.0 DETERMINING THE ENVIRONMENTAL EFFECTS OF RESPONSE AND COUNTERMEASURES

Response personnel should understand that an immediate - but poorly considered - response may result in greater overall environmental impact than one delayed to consider and implement measures protective of fish and wildlife and sensitive environments.

Decisions regarding appropriate countermeasures should take into account the relative impact of various response methods on fish and wildlife and sensitive environments. Informed decisions can be made on the deployment of appropriate countermeasures by consulting with the appropriate natural resource agency(ies). During the response, the OSC and/or responsible party **must** consult with the appropriate Federal and State natural resource trustees and land management agencies in regard to response activities related to the following concerns:

- a. physical disturbance of wildlife, their habitat, and other sensitive areas;
- b. illegal or inadvertent "taking" of live fish and wildlife or disturbance of carcasses by response personnel;
- c. the use of cleaning or bioremediation agents in fish and wildlife habitat and environmentally sensitive areas; and,
- d. the movement of oiled debris and other material in fish and wildlife habitat and other sensitive environments.

"Taking" in (b) above is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

5.1 Impacts of Response Methods on Sensitive Environments and Habitats

The following is a brief outline of adverse effects of various physical response methods associated with oil spill cleanup:

Countermeasure/Response and Associated Potential Adverse Effects

1. No removal
 - a. increased physical oiling of habitat
 - b. oil would remain in habitat indefinitely
 - c. oil may be naturally weathered, but may remain toxic to biota and would cause habitat degradation
2. Protective/sorbent boom deployment
 - a. physical disturbance to habitat
 - b. residual oil would remain in habitat indefinitely

- c. residual oil may be naturally weathered, but may be toxic to biota and would cause habitat degradation
 - d. Protective/sorbent boom deployment + mechanical pumping/skimming
 - e. physical disturbance to habitat
 - f. resuspension/dispersion of oiled sediments
 - g. physical disturbance to biota in the area
3. *In situ* burning
- a. smoke plume air quality concerns
 - b. riparian wildlife nesting, denning and feeding habitat may be permanently or temporarily damaged
 - c. substrate contamination
4. Mechanical pumping/skimming
- a. physical disturbance of habitat/biota
 - b. resuspension/dispersion of oiled sediments
 - c. disturbance to biota.

Note: Reference Section 3330 “Use of Applied Response Technologies” in the RCP for specific guidance on use of chemical agents in Region 9.

Movement/transport of oiled debris to the following habitats may pose a substantial threat to fish and wildlife and sensitive environments. To reduce risk to sensitive resources, oiled debris should not be placed in the following habitats:

- 1. riverine backwaters
- 2. wetlands
- 3. fish/shellfish spawning/nursery areas
- 4. waterfowl/migratory bird foraging/breeding/congregation areas.

5.2 Appropriate Response for Specific Sensitive Environments and Habitats

The American Petroleum Institute (API) and NOAA collaborated on a study addressing inland oil spills and finalized their findings in May, 1994. This is the first comprehensive guidance on responding to freshwater inland spills. API and NOAA classified specific oil response methods and their relative impacts on given environments and habitats. Physical, chemical and biological response methods are discussed and response impacts on the environment are classified as low, moderate, or high impact, and ineffective or inapplicable.

5.3 Monitoring Response Effectiveness - Monitoring Plans

A spill is dynamic and cleanup efforts must adjust to changes in conditions. Over time, the spilled product will typically spread, move downstream or downwind, and become weathered. Climatic and geographic conditions may also change. Efforts to control, contain and clean up the release can involve any of a number of containment and recovery methods, including booms, barriers, skimmers, sorbents, chemical agents, burning, and manual recovery. A continuous monitoring program to ensure the maximum removal of spilled product and protection of the environment throughout the duration of the cleanup is essential.

5.3.1 Monitoring Response Effectiveness

The OSC, in consultation with the natural resource trustee contacts, managers, and the responsible party, will monitor the effectiveness of response activities in protecting sensitive habitats and removing discharges of oil. The OSC should consult with natural resource trustees and managers regarding the need for, and methods to be employed in, an incident-specific long-term monitoring plan. As each of these methods has limitations associated with them, continued monitoring is necessary to ensure a successful cleanup. Monitoring will also be necessary to ensure that the selected response actions do not cause more harm than good. Monitoring activities may include visual observation, sampling, data collection and evaluation, and replacement of saturated or defective materials.

The assessment of aquatic biota health and abundance will, in some instances, be done by the State environmental agency or State fish and wildlife agency. Evaluation of spill effects on fish and wildlife, during and after cleanup, is the responsibility of both the trustees and the State fish and wildlife agency. The effects of specific removal actions or countermeasures, with regard to wildlife, will be judged on the basis of the status of fish and wildlife populations remaining in the affected area after cleanup. When no new animals are becoming fouled with oil, exposed to or otherwise being injured by the spill or countermeasures, and after consultation with the natural trustee representative, the cleanup may be judged to have been successfully completed.

5.3.2 Monitoring Plan Design

Monitoring spill response activity provides the OSC with useful information on the effectiveness of response actions and will assist trustees and natural resource managers in identifying and documenting potential impacts to the environment.

Specific plans for each incident response should be developed in consultation with natural resource trustees and natural resource agency managers and include the following points:

- a. **Monitoring Intensity Levels** - Field activities consisting of reconnaissance, environmental parameters assessment, sampling and documentation efforts, and laboratory activities should be conducted on a scale appropriate to the response.
- b. **Selection of Treated and Unaffected Sites** - Treated and unaffected (or reference) sites are useful for the purposes of gauging the degree of cleanup achieved and for establishing background conditions for the Natural Resource Damage Assessment (NRDA) pre-assessment phase. Such sites should exhibit similar chemical and physical characteristics to support their comparability. The following criteria should be considered: (1) environmental parameters, (2) physical habitat and geological morphology, and (3) degree of contamination by the released product and probability of further contamination.
- c. **Monitoring Parameters and Collection Frequency** - The size of samples collected should be based on the requirements of the analytical methods to be used for their analysis.

- d. **Data Quality Requirements and Assessments** - Follow applicable EPA and State guidelines.
- e. **Sample Custody Procedures** - Follow applicable EPA and State guidelines.
- f. **Sampling and Analytical Methods** - All media to be sampled, sampling methods, and laboratory analyses to be performed should be arrived at following consultation with natural resource trustees and natural resource managers and should follow EPA or other approved methods unless otherwise stipulated or requested by the OSC. Any variations from EPA or other approved methods should be documented and noted as such.
- g. **Revising Plans and Procedures** - Monitoring plans should include provisions for modifications, including additional consultation with natural resource trustees and natural resource managers as necessary.

Note: The use of the Special Monitoring of Advanced Response Technologies (SMART) protocol for rapid collection and reporting of real time scientific based information should be considered.

¹

6.0 FISH AND WILDLIFE RESPONSE CAPABILITIES AND SERVICES

Consultation with natural resource trustees and other natural resource management agencies during spill events having the potential for trust resource injuries is essential. Fish and wildlife response capabilities and services include:

6.1 Technical Expertise and Assistance

During a response, natural resource trustee contacts and managers will provide technical assistance and expertise on potential effects of oil on fish and wildlife, their habitats and other sensitive environments that can be found in the impacted and potentially impacted zone. They are usually familiar with the area or habitats affected and are able to provide recommendations on the best locations for equipment staging areas, boat access points, or boom anchor locations, and can identify, recommend, and prioritize sensitive environments where specific oil exclusion measures should be taken. They can also assist in the development of a monitoring plan and subsequent collection of data. Finally, the USFWS and the State wildlife agency will participate in, direct, or provide oversight for the protection, rescue, and rehabilitation of fisheries and wildlife.

Attachment 1 provides a list of Federal and State wildlife agency contacts. **Prior OSC approval is required for accessing the Oil Spill Liability Trust Fund (OSLTF) to reimburse trustee removal activities.**

¹ U.S Coast Guard, National Oceanic Atmospheric Administration, U.S. Environmental Protection Agency, Center of Disease Control and Prevention, Mineral Management Service 2001. Special Monitoring of Advanced Response Technologies.
<http://response.restoration.noaa.gov/oilaid/SMART/SMART.pdf>

The USFWS, in cooperation with other parties, compiled a manual entitled “Best Practices for Migratory Bird Care During Oil Spill Response” (Attachment 6) which discusses techniques for preventing oiling of birds as well as good practices for cleaning, caring for, and releasing recovered birds.

6.2 Wildlife Protection

Measures to protect wildlife may include the following:

- **preventing** the spill from reaching areas where wildlife are located by either containing, deflecting or recovering the material, or
- **detering** wildlife from entering areas already affected by contamination.

Wildlife deterrence devices or methods are generally grouped into visual or auditory, or a combination of both. The types of equipment used and sources for their acquisition can be found in Attachment 2. In an emergency, the USFWS, State wildlife agency, or local USDA Wildlife Services office may be able to locate and provide limited amounts of this equipment.

6.2.1 Acquisition and Utilization of Fish and Wildlife Response Capabilities and Services

The USFWS and State natural resource agency are responsible for overseeing spill response activities relative to their effects on fish and wildlife resources. These oversight responsibilities are carried out under the overall direction of the OSC. In some instances, the Federal and State agencies will participate in activities such as hazing, capture, relocation, and release of wildlife.

All wildlife rescue and rehabilitation efforts will be directed by the USFWS and/or the State wildlife agency, including the approval of a qualified wildlife rehabilitator (QWR). The USFWS and State natural resource agencies will usually recommend that the responsible party(ies) or OSC (in the case of an unknown or uncooperative responsible party) enter into a contract with a QWR. In all cases where a QWR is utilized, the USFWS and State natural resource agencies will remain in an oversight role. Oversight responsibilities include, but are not limited to, the identification and certification of a QWR; the supervision/oversight of injured wildlife collection, handling, cleaning and associated veterinary care; the release of successfully rehabilitated wildlife to the wild; and/or the disposition of carcasses to labs and evidence storage.

6.2.2 Federal Permit Requirements

Federal and State permits generally allow the permit holder to collect, transport, possess, rehabilitate, euthanize, release, or band migratory birds. Some permit holders also have authority to handle threatened and endangered species under separate Federal permits. Each of these permits may encompass more than one species. If a bird were considered to be migratory, but also threatened or endangered, it must be covered under a threatened and endangered species permit.

If migratory bird rescue and rehabilitation efforts are deemed to be necessary and worthwhile, the following Federal permits may apply:

Migratory Bird

Banding or Marking: 50 CFR 21.22. A permit is required before any migratory bird is captured for the purpose of banding or marking. Official bands are issued by the U.S. Geological Survey, Biological Resources Division, Bird Banding Laboratory for this purpose. Any rehabilitation group that participates in wildlife response activities and bands migratory birds is required to possess this permit.

Special Purpose Permit: 50 CFR 21.27. A permit may be issued for special purpose activities related to migratory birds, their parts, nests, or eggs. During oil spills and discharges, it is expected that the initial cleaning, emergency care, and triage of animals will be done by contracted experts under such a Special Purpose Permit. Unless authorized by the USFWS, no individual rehabilitator or rehabilitation group will be designated as "in charge" of rehabilitation efforts, but will work with the cleanup team under Regional guidelines. Off-site rehabilitation of any migratory bird will be done only by Federally-permitted rehabilitators. The licensed rehabilitator must notify the USFWS within 48 hours of acquiring an injured bird. The USFWS provides disposition guidance at that time. A Special Purpose Permit does not authorize the use of recovering sick or injured migratory birds for display or educational purposes.

Eagle Permits: 50 CFR 22. These permits authorize the taking, possession, or transportation of bald eagles or golden eagles, or their parts, nests, or eggs for scientific or exhibition purposes. They may be required for the possession of such birds during rehabilitation. The USFWS must be notified within 48 hours of acquisition of any bald and/or golden eagles. Directions will be given at that time regarding disposition and/or continued treatment.

Endangered Species: 50 CFR 17.22 and 17.32. Endangered Species Permits are for scientific purposes, enhancement of propagation or survival, or for incidental take. There is normally a 30-day comment period for this type of permit, which may be waived by the USFWS Director during emergency conditions where the life and health of a specimen is threatened and there is no alternative available. Rehabilitators participating in wildlife responses that include endangered species must be permitted to handle endangered species. In the case of endangered migratory birds, the rehabilitator must have a valid Special Purpose Permit that includes endangered species.

It is important to note that the Federal Regulations for the Endangered Species Act include provisions that allow for handling of sick, injured and orphaned wildlife specimens by certain individuals. 50 CFR 17.21(c)(3) & (4) describe this authority for endangered wildlife and 50 CFR 17.31(b) describes the authority available for threatened wildlife. In this section of the regulations, certain employees of the USFWS, other Federal land management agencies, NMFS and state conservation agencies are given the authority to aid wildlife species and are given specific steps that must subsequently be followed regarding disposition of these specimens.

Sources of Federal Permits:

Inquiries regarding **Federal Migratory Bird permits** and criteria for qualified wildlife rehabilitators are to be directed to the following:

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Region 1 (CA & NV)
Migratory Bird Permit Office
U.S. Fish and Wildlife Service
911 N.E. 11th Ave.
Portland, OR 97232-4181
Ph: (503) 872-2715

Region 2 (AZ)
Migratory Bird Permit Office
U.S. Fish and Wildlife Service
P.O. Box 709
Albuquerque, NM 87103
Ph: (505) 248-7882

Inquiries regarding **Federal Endangered Species permits** may be directed to:

Region 1 (CA & NV)
Ecological Services Operations
U.S. Fish and Wildlife Service
Recovery Department
911 N.E. 11th Ave., 4th Floor
Portland, OR 97232-4181
Anne Carlson
Ph: (503) 231-2374

Region 2 (AZ)
U.S. Fish and Wildlife Service
Stephanie Waeglay
500 Gold Ave. S.W
Room # 4012
Albuquerque, NM 87102
Ph: (505) 248-6649

In a spill situation, response and rehabilitation permit needs for endangered species will be determined by the USFWS on an emergency case-by-case basis administered under 50 CFR 17.21, 22, 31, and 32. Specific information with regard to obtaining a Federal permit for endangered species rehabilitation can be obtained through the appropriate USFWS Regional Ecological Services Operations Offices listed above.

USFWS personnel will handle all Federal permit activities through the Ecological Services Field Office responsible for the area where the spill occurs. The Field Office will coordinate Migratory Bird and Endangered Species permit needs with appropriate Regional Office staff.

6.2.3 State Permits

State wildlife permits may be obtained through the applicable State agency office listed below:

Arizona Department of Game & Fish
Wildlife Division
2221 W. Greenway Rd.
Phoenix, AZ 85023-4399
Bruce Taubert
(602) 789-3301

California Department of Fish & Game (does not require permit under emergency circumstances):

1416 9th Street
Room # 1260
Sacramento, CA 95814
John Gustafson

(916) 654-4260

Nevada Division of Wildlife
1100 Valley Rd.

Reno, NV 89512

(775) 688-1500

6.3 Wildlife Deterrence, Capture, and Treatment

If exposure of birds and other wildlife to oil occurs, an immediate decision must be made concerning the capture and rehabilitation of oiled birds and other wildlife. That decision must be made in consultation with the appropriate State and Federal natural resource trustees, because State and Federal permits are usually required for such activities. The Department of the Interior (DOI) has statutory responsibilities (delegated to the USFWS) for the protection of migratory birds and Federally-listed threatened and endangered species. If wildlife other than migratory birds or Federally-listed species are found injured, the responsible agency would typically be the State wildlife agency.

6.3.1 Selection of a Qualified Wildlife Rehabilitator (QWR)

If the decision is made, in consultation with the applicable natural resource trustees, to go forward with wildlife rehabilitation, the following criteria will be used by the USFWS and State wildlife agencies in selecting or recommending a QWR.

Guidelines for Selection of Wildlife Rehabilitator:

- must have, or be qualified to obtain, the appropriate Federal and State permits and licenses to collect, possess, treat, and band migratory birds, resident wildlife or threatened and endangered species.
- must have adequate liability insurance to protect both staff and volunteers.
- should have a proven record and experience in rescue and rehabilitation of oiled wildlife.
- must comply with all applicable Federal (Occupational Safety and Health Administration, etc.) and state safety regulations to protect staff and volunteers.

International Bird Rescue Research Center is permitted and recognized nationally and internationally as experts in oiled bird rehabilitation:

International Bird Rescue Research Center
699 Potter Street
Berkeley, California 94710
Phone: (510) 841-9086
Fax: (510) 841-9089

The Oiled Wildlife Care Network, headquartered at the [Wildlife Health Center](#) in the [School of Veterinary Medicine](#) at [University of California at Davis](#), provides access to permanent wildlife rehabilitation facilities and trained personnel that are maintained in a constant state of readiness for oil spill response within California. : Main phone number: (530) 752-4167

Website: <http://www.vetmed.ucdavis.edu/owcn/>

For information concerning regional or local bird rehabilitation organizations with similar capabilities, contact the USFWS Migratory Bird Permit office identified above.

6.3.2 Volunteers

While most wildlife rehabilitators and veterinarians cannot make the commitment of time needed to develop the resources to respond to major spills, many rehabilitators, veterinarians, and staff and volunteers from environmental organizations may be able to make significant contributions to spill-related wildlife rehabilitation efforts. The QWR should be able to identify each person's or organization's strengths and incorporate them into the rehabilitation effort. Volunteers must be appropriately trained, precisely scheduled for suitable tasks, and must be supervised at all times.

6.4 Other Roles and Responsibilities of Natural Resource Trustees

6.4.1 Law Enforcement

The U.S. Fish and Wildlife Service's Division of Law Enforcement (DLE) is responsible for investigating suspected and alleged violations of Federal wildlife laws including the Migratory Bird Treaty Act, 16 USC 703 *et seq.*, the Endangered Species Act, 16 USC 1538 *et seq.*, the Eagle Protection Act, 16 USC 668a *et seq.*, the National Wildlife Refuge Act, 16 USC 668dd *et seq.*, and several others.

Wildlife injuries, mortalities, and habitat impacts resulting from spills can constitute violations of DLE-enforced laws. Special Agents of the DLE or Refuge Officers of the Division of Refuges (when USFWS lands are involved) may be required to initiate investigations during the spill response phase in order to document violations and collect evidence in a timely manner. These law enforcement officers will normally coordinate their activities with the OSC or other on-scene law enforcement personnel. Additionally, the Special Agents will insure that responders possess the necessary federal permits (see Section 6.2.2) and that wildlife-related response activities are accomplished in accordance with applicable law and permit provisions.

Special Agents and Refuge Officers often have detailed knowledge of the local terrain and can provide timely, site-specific information to response personnel. In many cases, the DLE and the Service's NRDA personnel (see Section 6.4.2) have shared and similar interests and will work cooperatively on collecting or sampling, recording, storage, transportation, and laboratory analysis of injured or dead wildlife. When necessary, additional personnel operating under the guidance and direction of the DLE may be brought on scene to assist with wildlife handling or collection.

The Department of the Interior, Office of Environmental Policy and Compliance send copies of National Response Center spill reports to USFWS Regional Response Spill Coordinators, and in turn forward copies to the USFWS DLE's Environmental Investigations Coordinator (EIC). The DLE/EIC reviews these reports and may initiate contact with the responsible party(ies) and/or responders in order to ascertain the magnitude and impacts of the spill and determine whether a DLE response is warranted.

6.4.2 Natural Resource Damage Assessment (NRDA)

NRDA is authorized by the Clean Water Act (CWA) and by the Oil Pollution Act of 1990 (OPA). Section 1006(b) of OPA directs natural resource trustees (*i.e.*, Federal landowners and natural resource managers [including DOI, DOD, DOA/USFS, DOC/NOAA and DOE], States, federally-recognized Indian tribes, and foreign governments) to: (1) determine whether injury to, destruction of, loss of, or loss of use of natural resources and services has resulted from a release or threatened release; (2) assess, and if appropriate, present a claim for and recover damages for such injuries (including the reimbursement of reasonable costs of assessing the damages); and (3) develop and implement a plan for the restoration, replacement, or acquisition of the equivalent of the injured natural resources and services under their trusteeship. All damages collected must be used solely for the above-stated purposes.

Under OPA, natural resource trustees may initiate NRDA activities during the spill response phase. NRDA initiation activities constitute a preliminary assessment, or preassessment, of spill-related natural resource injuries and lost services. When preassessment activities occur concurrently with removal actions, sampling and field work conducted by the natural resource trustees should be coordinated with the FOSC to minimize any interference with response operations and, if appropriate, to avoid duplication of sampling and data collection efforts. This preassessment information is used to determine whether a NRDA and emergency restoration action is appropriate. **Prior approval for Coast Guard Oil Spill Liability Trust Fund reimbursement of trustee NRDA initiation costs is provided by the National Pollution Funds Center.**

Under certain circumstances, natural resource trustees may undertake emergency restoration efforts to prevent or reduce the immediate migration of oil onto or into a trust resource or to immediately restore injured natural resources. Emergency restoration activities by the natural resource trustees should be coordinated with the FOSC.

6.4.3 Natural Resource Trustees - NRDA Roles and Responsibilities

DOI is a Federal natural resource trustee for migratory birds, anadromous fish, certain federally-listed threatened and endangered species, certain marine mammals and DOI-managed lands such as National Parks, National Recreation Areas, National Wildlife Refuges and federally-managed public lands. The DOI Office of Environmental Policy and Compliance (OEPC) is the initial contact for notification and overall coordination of Departmental activities. Within the DOI, the FWS is the bureau with management responsibility for migratory birds, certain threatened and endangered species, anadromous fish, certain marine mammals and the lands and waters in the National Wildlife Refuge System. The USFWS will likely be among those involved in spill-related preassessment activities, however, other DOI bureaus such as Bureau of Indian Affairs, Bureau of Land Management, Bureau of Reclamation, Minerals Management Service and National Park Service might also be involved.

In instances where other Federal agency lands or resources are involved, those agencies may also serve as natural resource trustees. At the time of a spill, the involved Federal natural resource trustees will agree upon one Federal agency to act as Federal lead administrative trustee (FLAT), and will convene a trustee group in cooperation with other Federal, State, Tribal, and foreign trustees, as appropriate, to ensure the best possible coordination of natural resource trustee activities (such as coordination of collective trustee funding needs, data gathering, damage assessment, and negotiations with the responsible parties).

6.5 Health and Safety Concerns in Wildlife Rescue and Rehabilitation

The NCP at 300.210 (4) (ii) (h) requires the FWSEA to identify and secure the means of providing, if needed, the minimum required OSHA and EPA training for volunteers, including those who assist with injured wildlife. The OSHA Hazard Communication Standard (also referred to as “HazCom”), should be used as a standard for communicating the potential hazards to individuals involved in assisting injured wildlife.² HazCom applies to wildlife rehabilitation organizations because petroleum and hazardous chemicals are considered a human health hazard.

The OSC’s incident-specific site safety plan should include wildlife worker-related concerns as well. Besides chemical hazards, other hazards such as mechanical, physical and biological hazards are also present during rescue and rehabilitation activities. Workers must be aware of and trained on dealing with these hazards as well. Such training elements should include field and facility concerns on the behavior of impacted birds, proper animal restraint, and personal protective equipment and clothing to protect workers from blood-borne pathogens and zoonoses.

Personnel health and safety concerns relating to wildlife rescue and rehabilitation should be considered in all plans and actions when dealing with contaminated wildlife. **Attachment 4, Wildlife Rehabilitation Facilities, Equipment, and Requirements, contains additional information on safety, training and the potential risks associated with wildlife rescue and rehabilitation.**

Two Occupational Safety and Health Administration (OSHA) regulations cover the majority of occupational health and safety issues encountered during wildlife rescue and rehabilitation: the Hazardous Wastes Operations and Emergency Response rule (29 CFR 1910.120) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

The Hazardous Wastes Operations and Emergency Response rule (also referred to as “HAZWOPER”) applies to organizations or individuals involved in wildlife retrieval and rehabilitation efforts. Because each state may also have its own worker safety requirement, coordination with the appropriate state agency should also be conducted to ensure those requirements are met.

² For more information about “HazCom” log onto:
<http://www.osha.gov/SLTC/hazardcommunications/index.html>

Rehabilitation organizations are legally required to educate and protect all employees, including volunteers. Individuals working with animals need information concerning all potential hazards associated with the handling of those animals. The following minimum requirements should be applied to wildlife rescue and rehabilitation personnel, including volunteers:

- Wildlife rescue and rehabilitation management personnel - this is the core team of certified rehabilitators who will direct operations. These people must have 24 hours of classroom training in hazardous waste operations and emergency response.
- Rehabilitation facility volunteers - these volunteers work at the rehabilitation facility (typically located well away from the spill site) under the direction of the facility management team. They are not allowed on-scene (within the response center and staging areas), nor in the "hot zone" (impacted area) unless additional training is provided. Volunteers working in this category must receive a minimum of four hours of training in the Hazard Communication Program before they can begin work.
- Retrieval volunteers - these volunteers work under the direction of the search and rescue management team and may be allowed on-scene, but not in the "hot zone". Volunteers working in this category must receive 4 to 8 hours of training in the Hazard Communication Program before they can begin work.
- "Hot zone" wildlife retrieval and capture activities must be performed by personnel having a minimum of 40 hours of classroom safety training meeting OSHA guidelines for hazardous waste workers, including eight-hour annual refresher training.

The OSC, in consultation with OSHA's representative to the Regional Response Team, has responsibility for making decisions when training requirements are in question.

7.0 EVALUATING THE INTERFACE OF THE FWSEA WITH NON-FEDERAL RESPONSE PLANS

Section 300.210(c)(4)(i) of the NCP mandates that the FWSEA to each Area Contingency Plan define the requirements for evaluating its compatibility with non-Federal response plans on issues affecting fish and wildlife, their habitat, and sensitive environments.

The final rule on Oil Pollution Prevention for Non-Transportation-Related Onshore Facilities, 40 CFR Part 112, requires facilities with a total oil storage capacity greater than or equal to one million gallons to submit Facility Response plans if located at a distance such that a discharge of oil could cause injury (as defined at 40 CFR 112.2) to fish, wildlife, sensitive environments and public water intakes. Facility owners or operators must determine the maximum distance at which a worst case oil spill from their facility could cause injury to fish and wildlife and sensitive environments and develop a plan for mitigating that discharge's potential

adverse effects. Facility plans must be consistent with this Annex. EPA reviews and approves Facility Response Plans for compatibility with this Annex. Pipeline plans in the Region are reviewed and approved by the U.S. Department of Homeland Security.

Participation by facilities in the Area and Sub-area Committees is encouraged. Joint exercises will be conducted to test facility plans and their interface with this Annex.

8.0 ACRONYMS

ACP- Area Contingency Plan

API- American Petroleum Institute

Annex- Fish and Wildlife and Sensitive Environments Annex

BLM- Bureau of Land Management, Department of the Interior

COE- Corp. of Engineers

CFR- Code of Federal Regulations

CWA- Clean Water Act

DLE- Division of Law Enforcement, U.S. Fish and Wildlife Service, Department of the Interior

DOA- Department of Agriculture

DOC- Department of Commerce

DOD- Department of Defense

DOE- Department of Energy

DOI- Department of the Interior

EIC- Division of Law Enforcement's Environmental Investigations Coordinator, U.S. Fish and Wildlife Service, Department of the Interior

ESI- Environmental Sensitivity Indices, developed by the National Oceanic and Atmospheric Administration

FLAT- Federal Lead Administrative Trustee

FOSC- Federal On-Scene Coordinator

FWSEA- Fish and Wildlife and Sensitive Environments Annex

GIS- Geographic Information System

HAZCOM- Hazard Communication Standard

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HAZWOPER- Hazardous Waste Operations and Emergency Response Standard
[29 CFR 1910.120 and 40 CFR 320]

NCP- National Contingency Plan

NMFS - National Marine Fisheries Service, National Oceanic and Atmospheric
Administration

NOAA- National Oceanic and Atmospheric Administration

NPS- National Park Service, Department of the Interior

NRDA- Natural Resource Damage Assessment

OEPC- Office of Environmental Policy and Compliance, Department of the Interior

OPA- Oil Pollution Act

OSC- On-Scene Coordinator (Federal or State)

OSHA- Occupational Safety and Health Administration

OSLTF- Coast Guard Oil Spill Liability Trust Fund

OSPR- Office of Spill Prevention and Response, State of California

QWR- Qualified Wildlife Rehabilitator

RAMSAR TREATY- The Convention on Wetlands, signed in Ramsar, Iran, in
1971, is an intergovernmental treaty which provides the framework for national
action and international cooperation for the conservation and wise use of
wetlands and their resources.

RCP- Regional Contingency Plan

RRT- Regional Response Team

T&E- Threatened and Endangered Species

U.S. EPA- United States Environmental Protection Agency

USDA- United States Department of Agriculture

USFS- United States Forest Service, Department of Agriculture

USFWS- United States Fish and Wildlife Service, Department of the Interior

USGS- United States Geological Survey, Department of the Interior

**ATTACHMENT 1: CONTACTS FOR NATURAL RESOURCES TRUSTEES AND
NATURAL RESOURCE MANAGERS**

Federal Natural Resources Trustee and/or Manager Contacts:

**U.S. Department of the Interior
(Designated Federal Trustee)**

Office of Environmental Policy and
Compliance (OEPC)
Patricia Sanderson Port, Regional
Environmental Officer
1111 Jackson Street, Ste. 520
Oakland, CA 94607
Ph: (510) 817-1477
Cell: (415) 420-0524
Fax: (415) 419-0177

U.S. Fish and Wildlife Service
Regional Office – Region 1 (CA, NV)
Regional Spill Response Coordinator
Charlie Hebert
911 NE 11th Ave.
Portland, OR. 97232-4181
Ph: (503) 231-6223
Fax: (503) 248-6788

U.S. Fish and Wildlife Service
Sacramento Field Office
Regional Spill Response Coordinator
John Henderson
2800 Cottage Way, Rm. E-1803
Sacramento, CA 95825
Ph: (916) 414-6595
Fax: (916) 414-6713

U.S. Fish and Wildlife Service
Regional Office – Region 2 (AZ)
Regional Spill Response Coordinator
Steve Robertson
500 Gold Ave., Suite 4012
Albuquerque, NM 87102
Ph: (505) 248-6669
Fax: (503) 248-6788

**Local U.S. Fish & Wildlife Service
Contacts:**

U.S. Fish and Wildlife Service
Arizona State Office
Environmental Contaminants
Coordinator
Denise Baker
2321 West Royal Palm Road
Suite 103
Phoenix, AZ 85021-4951
Ph: (602) 242-0210
Fax: (602) 242-2513

U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
Environmental Contaminants Division
Judy Gibson
6010 Hidden Valley Road
Carlsbad, Ca 92009
Ph: (760) 431-9440
Fax: (760) 431-9170

U.S. Fish and Wildlife Service
Ventura Fish & Wildlife Office
Spill Response Coordinator
Denise Steurer
2493 Portola Road, Suite B
Ventura, Ca 93003
Ph: (805) 644-1766
Fax: (805) 644-3958

U.S. Fish and Wildlife Service
Sacramento Fish & Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, Ca. 95825-1846
Ph: (916) 414-6600
Fax: (916) 460-4619

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U.S. Fish and Wildlife Service
Nevada Fish & Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, Nevada 89502-7147
Ph: (775) 861-6300
Fax: (775) 861-6301

**U.S. Department of Commerce
National Oceanic and Atmospheric
Administration**

Interim NOAA Scientific Support
Coordinator
LT Demian Bailey
(206) 321-1179 (24 hr)
Ph: (206) 526-4277
Demian.bailey@noaa.gov

Steve Thompson
Ph: (415) 561-6624
24-Hour: (415) 556-8507
Fax: (415) 556-8507
Steven.A.Thompson@Noaa.Gov

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Anne Fischer (Alternate)
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US Dept. of Navy**

Don Montoro
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Fax: (619) 556-1431
Montoro.Don@Ns.Cnrsw.Navy.Mil

Department Of Energy

Mike Cornell
Ph: (925) 422-0138
Fax: (925) 637-1794
Mike.Cornell@Oak.Doe.Gov

**California Department of Fish and
Game**

**Office of Spill Prevention and
Response**

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Ph: (916) 324-7629
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Msowby@Ospr.Dfg.Ca.Gov

Yvonne Addassi (Alternate)
Ph: (916) 324-7626
Yaddassi@Ospr.Dfg.Ca.Gov

**ATTACHMENT 2: WILDLIFE DAMAGE MANAGEMENT EQUIPMENT
SUPPLIERS**

Repellents

**Electronic Alarm and
Recorded Bird
Repellents**

Air Birdstrike
Prevention
15 Edgewood St.
Worcester, MA 01602
(301) 963-9270
(Radio-controlled
planes)

Av-Alarm Corp.
675-D Conger St.
Eugene, OR 97402
(503) 342-1271

Coleman Equipment,
Inc.
342 Madison Ave.
New York, NY 10017
(212) 687-2154
(vigil-andy)

Falcon Safety
Products Inc.
1065 Bristol Road
Mountainside, NJ
07092
(201) 233-5000
(air horn)

Jennings Industries,
Inc.
2730 Chanticleer Ave.
San Cruz, CA 95060
(408) 475-8311

Margo Horticultural
Supplies Ltd.
RR 6 Site 8, Box 2
Calgary, Alberta T2M
4L5
Canada
(403) 285-9731
(microwave motion
detector)

Reed-Joseph
International Co.
P.O. Box 894
Greenville, MS 38702
(800) 647-5554

Signal Broadcasting
Co.
2314 Broadway St.
Denver, CO 80205
(303) 295-0479
(distress call tapes)

Propane Exploders

Alexander-Tagg Inc.
395 Jacksonville Rd.
Warminster, PA 18974
(215) 675-7200

Coleman Equipment
Inc.
342 Madison Ave.
New York, NY 10017
(212) 687-2154
(vigil andy)

M. J. Flynn Inc.
Syracuse, NY
(315) 437-6536
(Zon gun)

C. Frensch Ltd.
168 Main St. E.
Box 67
Grimsby, Ontario L3M
1G4
Canada
(416) 945-3817

Pete Konzak
Box 20
Minnewaukan, ND
58351
(701) 473-5646
(jump-up scarecrow)

B.M. Lawrence & Co.
Tomko Enterprises
Inc.
233 Sansome St.
San Francisco, CA
94104
(415) 981-3650
(Zon gun)

McKinzie Scientific
P.O. Box 1077
1340 Kerr Ave.
Lancaster, OH 43130
(614) 687-4617

Pisces Ind.
P.O. Box 6407
Modesto, CA 95355
(209) 578-5502

Reed-Joseph
International Co.
P.O. Box 894
Greenville, MS 38702
(800) 647-5554

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Smith-Roles
1367 S. Anna St.
Wichita, KS 67209
(316) 945-0295

Spring Ledge Farms
RD 3
Dundee, NY 14837
(607) 243-8123

Teiso Kasei Co. Ltd.
350 S. Figueroa St.,
Suite 350
Los Angeles, CA
90071
(213) 680-4349

USDA, APHIS, S&T,
DWRC
P.O. Box 25266,
Building 16
Denver Federal Center
Denver, CO 80225-
0266
(303) 236-7877
(farmer fred)

Pyrotechnic Devices

The Bullseye Gunshop
1081 Huntingdon Ave.
Waterbury, CT 06704
(203) 755-1055

California Seal Control
Corp.
P.O. Box 949
San Pedro, CA 90733
(310) 833-2681
(underwater
explosives)

Colonial Fireworks
5956 Ivanhoe
Ypsilanti, MI 48197
(313) 482-3272

New Jersey Fireworks
Co.
Box 118
Vineland, NJ 08360
(609) 692-8030
(rope firecrackers)

O.C. Ag. Supply
1328 Allec St.
Anaheim, CA 92805
(714) 991-0960

Reed-Joseph
International Co.
P.O. Box 894
Greenville, MS 38702
(800) 647-5554

Stoneco Inc.
P.O. Box 187
Dacono, CO 80514
(303) 833-2376

Sutton Ag. Ent.
1081 Harkins Rd.
Salinas, CA 93901
(408) 422-9693

Wald & Co.
208 Broadway
Kansas City, MO
64105
(816) 842-9299
(rope firecrackers)

Western Fireworks Co.
2542 SE 13th Ave.
Canby, OR 97103
(503) 266-7770

**Visual Bird
Repellents**

Atmospheric
Instrumentation
Research (AIR) Inc.

1880 S. Flatiron Ct.,
Suite A
Boulder, CO 80301
(301) 433-7187
(balloons, kites)

Bird-X
325 W. Huron St.
Chicago, IL 60610
(312) 642-6871
(Raptor effigies, lights)

Coleman Equipment,
Inc.
342 Madison Ave.
New York, NY 10017
(212) 687-2154
(vigil-andy)

R.E. Deitz Co.
225 Wilkinson St.
Syracuse, NY 13201
315) 424-7400
(strobe lights)

Edmund Scientific
Company
7977 EDSCORP
Building
Barrington, NJ 08007
(609) 547-3488
(3' balloons)

The Huge Co.
7625 Page Blvd.
St. Louis, MO 63133
(800) 325-3371
(Raptor effigies, lights)

Kite City
1201 Front St.
Old Sacramento, CA
95814
(Hawk Kite)

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Pete Konzak
Box 20
Minnewaukan, ND
58351
(701) 473-5646
(jump-up scarecrow)

Offshore Sourcing
Development
1240 Josephine Road
Roseville, MN 55113
(612) 633-2384
(balloons)

Raven Ind. Inc.
P.O. Box 1007
Sioux Falls, SD 57117
(605) 336-2750
(balloons)

Mellingers
2310 W. South Range
Rd.
N. Lima, OH 44452
(800) 321-7444
scarecrow)

Orchard Equipment &
Supply Co.
P.O. Box 540
Conway, MA 01341
(413) 369-4335
(balloons)

Nishizawa (USA) Ltd.
112 W. 9th St., Suite
903
Los Angeles, CA
90015
(213) 627-7491
(Mylar balloons, flash
tape)

Pest Management
Supply, Inc.
P.O. Box 938
Amherst, MA 01004
(413) 253-3747
(balloons, flash tape)

**ATTACHMENT 3: STATE AND COUNTY LISTING OF FEDERALLY
THREATENED (T), ENDANGERED (E) AND PROPOSED (P) SPECIES IN EPA
REGION 9-**

For listings by state log onto: <http://endangered.fws.gov/wildlife.html#Species>

For State of Arizona log onto:
http://www.azgfd.com/w_c/edits/hdms_species_lists.html

For State of California contact:
California Department of Fish & Game
Information Services-Natural Diversity Data Base
(916) 324-3812

For State of Nevada please see <http://endangered.fws.gov/wildlife.html#Species>

OCSs may refer to <http://www.uscg.mil/d11/m/rrt9web/> to find GIS data. The website contains an array of data, for example the NOAA Coastal Environmental Sensitivity Index Atlases to USFWS designated critical habitat websites for Region 9.

ATTACHMENT 4: WILDLIFE REHABILITATION FACILITIES, EQUIPMENT, AND REQUIREMENTS

The below Wildlife Rehabilitation guidelines are in effect for EPA's R9. California has a separate set of guidelines laid out in the *Wildlife Response Plan for California* (Attachment 5). Also useful to help inform wildlife response actions is the USFWS *Best Practices for Migratory Bird Care During Oil Spill Response* (Attachment 6).

Facility Requirements

Facility needs usually focus on the majority of species affected by a petroleum discharge, which are generally birds. Facility requirements can vary significantly, depending on: overall size of response, species and age of wildlife contaminated, the type of contaminant, the season/weather, the location of the spill, and the rehabilitation effort. The facility needed will vary according to the needs of the specific spill situation, and should be determined by a QWR experienced in oil spill response work.

Because facility requirements can vary significantly, a permanent facility is not always advisable, and may actually be an impediment in providing the appropriate facility design for the situation. A suitable facility must have a large open space on the ground floor that can easily be configured and reconfigured to accommodate the changing needs of this unique form of wildlife rehabilitation. All rehabilitation efforts should be accommodated under one roof. Experience has taught that multiple buildings or a tent situation are inefficient and unsuitable. A warehouse, armory, motor pool or convention hall that is accessible to a trained labor force, is within reasonable distance from hotel accommodations, and has adequate parking and exterior grounds could meet this requirement. If a facility is situated in a secure site, i.e., military installation or refinery, accommodations for a fluctuating volunteer work force need to be addressed. The facility may be located up to 3-4 hours from the spill site, provided that on-scene stabilization is administered prior to transport. An oil spill stabilization site can be located at the time of a spill.

It is recommended that a list be assembled of potential real estate within the identified high risk areas, and that the sites be physically reviewed by a representative of a wildlife response group with major spill response experience. Once acceptable facilities have been identified, all costs, availability, and contract information should be reviewed on a yearly basis.

The following list represents minimum facility needs for rehabilitating 100-150 oiled wildlife.

1. Space Requirements
 - Front Desk/Admissions 300 sq. ft.
 - Operations Office 300 sq. ft.
 - Kitchen/Food Storage 300 sq. ft.
 - Husbandry Area (large central room) 2800 sq. ft.
 - Supplies/Storage 500 sq. ft.
 - Wildlife Cleaning Area 1 750 sq. ft.

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Medical Treatment/Exam 300 sq. ft.
Pathology/Lab/Cold Storage 150 sq. ft.
Isolation Ward 300 sq. ft.
Volunteer/Worker Rest Area 300 sq. ft.
Bathrooms, Deacon, Changing 200 sq. ft.
Outside Pool Areas @ one 10' x 15' x 2' pool for 15 birds, and access and maintenance space 3300 sq. ft.
Nonhazardous and regulated (medical and oily) trash Indoor 100 sq. ft.
Outside 400 sq. ft.
Outside area for oily wastewater 300 sq. ft.
Loading Dock/Parking for 50 (opposite side of building from outside cages) 5000 sq. ft.
Total interior sq. ft. 6300 sq. ft. Total exterior sq. ft. 9000 sq. ft.

Total sq. ft. 15,200 sq. ft.

Note: If an existing wildlife rehabilitation center were to be used, it would require the above space in addition to the space allocated for any existing caseload. Animals impacted by an oil spill must be cared for separately from the in-house population.

2. Hot/Cold Water Capacity

When selecting a wildlife response facility, it is important that the water supply not be contaminated by the oil spill. For preplanning purposes, potential facility locations should be selected in areas of low oil spill probability. All oily waste water must be collected and disposed of in accordance with Federal and municipal regulations, however, the large quantities of rinse, pool, and general use water is permissible for discharge to most municipal systems. It is therefore inadvisable to select a location that relies on a septic system to handle waste because this large volume of water can exceed the design capacity of most septic systems. Ideally there should be external access to cold water supplies for filling pools.

Due to the nature of wildlife rehabilitation, large amounts of water are used in many locations throughout the facility. It is therefore advisable that the facility has floors that can tolerate being wet, with drains at least in the areas dedicated to cleaning activities.

Cold Water Volume (pools and general use) 23,360 gal./day
Hot Water Volume (animal cleaning only) 450 gph @ 104 degrees F. (6750 gal/day @ 15 hrs.)
Water Pressure (animal cleaning only) 50-60 psi.
Water Hardness (animal cleaning only) 2.5-3.5 grains/gallon

A suitable facility in terms of size, availability, and location should not be discounted due to hot water and hardness capacities. Provided that there is an adequate cold water supply, mobile hot water and treatment systems can be retrofitted into existing equipment without much difficulty.

3. Electrical/Lighting

The electrical needs of a wildlife response facility are very similar to those of a conventional manufacturing/industrial operation in so far as there is a need for general and task lighting, with an adequate number of separately circuited outlets throughout the space capable of providing 20 amp protection. Because of potential risk of electrical shock in wet areas, the addition of GFI circuit breakers in those areas is desirable.

In addition to lighting and the HVAC system, electric power will be used for freezers, refrigerators, heat lamps, pet dryers, office and medical equipment, pool pumps and filters, power tools, etc.

200 amp 120/240 volt 3-wire single phase service with minimum of ten (10) 20 amp circuits in addition to the lighting and HVAC needs, with the ability to expand.

4. HVAC Systems

The three main concerns regarding air quality are:

1. Eliminating the thermal stress to debilitated animals by providing a stable, draft free inside air temperature between 70-80 degrees F.;
2. Minimizing human exposure to petroleum volatiles; and
3. Minimizing animal exposure to pathogenic organisms (bacterial and fungal).

Air within a wildlife response facility should be exchanged 6 times per hour within office areas, 10 times per hour within large open spaces involving animal care, and 20 times per hour within critical care and/or surgical areas.

Typical HVAC systems used in industrial space are often forced air or closed recirculating systems which by themselves will not meet the above requirements. These systems will need to be augmented with portable filtration (HEPA) and air exchange units. The design of these systems should be determined by the wildlife response group once the facility has been selected, and the particulars of the animal caseload is known.

Air quality in systems that employ return air filtration can be enhanced through the replacement of the existing filters with an electrostatic type. This will not, however, preclude the need for HEPA type filtration and regular air exchanges as outlined above.

5. Communications

A minimum of three (3) telephone lines (public, private, fax/modem) are necessary with the ability to add more if needed.

Equipment, Training and Personnel Needed For Field Retrieval

1. Equipment

- Boats
- Safety protection/flootation gear
- Personal protective clothing

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- Different types of netting
- Transport containers (boxes, ventilated)
- Transport vehicles (to and from spill site)
- Adequate communication (cellular phones, etc.)
- If stabilization is necessary at spill site (prior to transportation to rehabilitation facility), need rehabilitators to have necessary training and equipment available for stabilization

2. Training

- OSHA training
- Coast Guard boat training
- QWR wildlife rescue and rehabilitation training
- QWR wildlife handling training

3. Personnel

- Natural resources trust agencies personnel
- QWR trained field retrieval personnel
- QWR trained rehabilitation personnel
- Enforcement personnel
- Boat handlers
- Rehabilitators trained by QWR (both aspects of rehabilitation and handling)
- Personnel to handle 1-800 # calls for potential oiled wildlife sightings

If wildlife retrieval must begin prior to the QWR arrival, there is a need to specify where the wildlife would be taken for rehabilitation and who would be handling them.

Drills and Exercises (NCP sec. 300.212)

The State natural resource agency, the USFWS, and the QWR should be incorporated into appropriate drills and exercises involving oil spill response situations which may potentially impact wildlife. By including these groups as part of the exercise, the OSC will fully understand and appreciate the vital role that wildlife rehabilitation plays in the overall success of the response strategy.

Since the majority of this work occurs during the first 24-36 hours of a spill incident, early involvement of the QWR in drills and exercises is imperative. The QWR should provide a daily end-of-day report to the incident commander, outlining all communication and response efforts made by the QWR. This information should be incorporated into the daily drill documents. The QWR participating in the drills/exercises should be included in the final critique of the drill/exercise to help ensure a complete and accurate assessment is made regarding the ability of all participants to respond to wildlife at risk.

Safety and Training (NCP sec. 300.210(c)(4)(ii)(h))

The minimum required Occupational Safety and Health Administration (OSHA) or U.S. EPA training for volunteers, including those who assist with injured wildlife is presented below. Training should precede actual work in hazardous environments.

Two OSHA regulations address most of the occupational health and safety issues encountered during wildlife rescue and rehabilitation:

1. The OSHA standard for Hazardous Waste Operations and Emergency Response (HAZWOPER) (29 CFR 1910.120) applies to organizations or individuals involved directly in retrieval or clean-up efforts. In addition, each State may have its own worker safety requirements. Coordination with the appropriate State agency should be conducted to ensure those requirements are also met.
2. The Hazard Communication Standard (29 CFR 1910.1200), also known as "Right-to-Know Law" or "HazCom", requires that all chemicals in the work place be fully evaluated for possible physical or health hazards and that all information relating to these hazards be made available to all workers. HazCom applies to rehabilitation organizations because petroleum is considered to be a hazard to human health.

Appropriate available training offered by U.S. EPA (through their Environmental Response Training Program in Cincinnati, Ohio) includes the following:

- a. Hazardous Materials Incident Response Operations (165.5) 40 hrs. (This course meets OSHA's requirement (29 CFR 1910.120) for a minimum of 40 hours of classroom safety training for hazardous waste site workers.)
- b. Emergency Response to Hazardous Materials Incidents (165.15) 40 hrs. (This course meets and exceeds OSHA's requirement (29 CFR 1910.120 paragraph q) for a minimum of 24 hours of training for a hazardous materials technician.)

Rehabilitation organizations are legally required to educate and protect all employees, including volunteers, in accordance with OSHA standards. Individuals working with oiled animals must receive information concerning all potential hazards associated with the handling of these animals. The following requirements should be applied to wildlife rescue and rehabilitation personnel, including volunteers:

Wildlife rescue and rehabilitation management personnel - This is the core team of rehabilitators who will direct operations. These people must have 24-hours of classroom training in hazardous waste operations and emergency response.

Rehabilitation facility volunteers - These volunteers work under the direction of the management team. Persons in this category must receive four hours of training at the HAZWOPER Awareness level, or have sufficient equivalent training or proven experience in specific competencies, before they can begin work. Additional training would be necessary before volunteers would be allowed on scene.

Retrieval volunteers - These volunteers work under the direction of the search and rescue management team and are allowed on-scene, but not in the hot zone. Volunteers working in this category must receive between four and eight hours of HAZWOPER training (Awareness level) and site safety training before they can begin work.

Wildlife Response Training

A contracted private source may be responsible for training volunteers on site. Additionally, USFWS may be interested in providing periodic training in preparation for spills.

Training Topics:

1. general overview of the external and internal effects of oil on wildlife;
2. current treatment protocols;
3. facility needs; and,
4. human health and safety.

Training Goals:

1. clarify the duties and the responsibilities of the spiller, cleanup contractor, State and Federal agencies, volunteers and the general public;
2. improve the treatment and the release rates for affected wildlife;
3. enhance speed and quality of a response involving wildlife following an oil spill event;
4. reduce wildlife response costs by making efforts more cost-effective; and,
5. help to insure the safety of all those working in a wildlife response.

Wildlife Risks

Specific human health and safety concerns in handling wildlife will vary with the species of animals involved, but the following safeguards apply universally:

1. Wearing gloves while cleaning animal cages and food bowls, washing hands with a disinfectant soap, wearing gloves and surgical mask while performing necropsies (post-mortem examinations), and providing for adequate room ventilation will help reduce the risk of contracting wildlife transmitted diseases.
2. Protective eyewear should be worn when working with birds having long, pointed beaks, and towels (for entire body control) or gloves should be used to restrain feet of all birds.
3. All individuals who will be handling oiled wildlife must be trained in proper capture and restraint techniques. The head (beak or teeth) and feet (talons or claws) of most animals can cause serious injuries if the handler has received improper or incomplete training.
4. Animals should be held at or below waist-height, away from human faces. At least two people should be present for any prolonged handling (examinations, washing, etc.). Aggressive mammals should be controlled

with nets or snare poles, and should be sedated for any prolonged handling.

5. Any worker handling wildlife should have a current tetanus shot, and only individuals who have received prophylactic rabies vaccinations should handle wild mammals.

Diseases which can be transmitted from animals to humans pose a potential risk to oil/hazmat spill responders during the rescue, rehabilitation and release of wildlife. Although this list may not be inclusive, the following diseases are of particular concern:

Bird diseases:

- Aspergillosis--a fungal disease causing respiratory problems in humans.
- Chlamydiosis--a bacterial disease causing flu-like symptoms in people. Potentially fatal.
- Salmonellosis--a bacterial disease causing diarrhea in humans.
- Avian Tuberculosis--a bacterial disease causing skin lesions and occasionally respiratory problems in humans.
- Histoplasmosis--a fungal disease causing pneumonia in humans.

Mammal diseases:

- Rabies--a viral disease causing central nervous system (CNS) disorder in humans. Fatal if untreated.
- Giardia--a protozoal disease causing diarrhea.
- Baylisascaris--a parasite causing CNS disorder & death in humans.
- Leptospirosis- a bacterial infection from mammal urine. Frequently fatal if untreated.
- Campylobacteriosis--a bacteria causing diarrhea in humans.
- Cryptosporidiosis--a protozoal disease causing diarrhea in humans.
- Toxoplasmosis--a protozoal disease which may cause CNS disorder in humans.

If responders are likely to come into contact with captured wildlife during a spill event, the site safety officer (or a contracted veterinarian) should be consulted to determine appropriate prevention measures. Volunteers should contact medical professionals if they become ill during or after potential exposure to wildlife diseases. Medical professionals may also wish to consult the U.S. Geological Survey, **National Biological Survey, National Wildlife health Center in Madison, Wisconsin (608-271-4640; fax 608-264-5431), for wildlife disease diagnostic assistance.**

Safety Equipment

Appropriate equipment is important for safe spill response activities. Necessary equipment will vary according to the particular situation, and may depend on such circumstances as the size of the spill and types of resources affected. For

individuals not involved directly in on-site (hot zone) retrieval or cleanup efforts (exposed only to Level D hazards), personal protective equipment may include the following:

1. coveralls
2. gloves
3. boots/shoes, leather or chemical resistant, steel shank and toe
4. safety glasses or chemical splash goggles
5. hard hat with face shield
6. escape mask.

Where sampling includes aquatic sites, personal protective equipment should include:

1. knee, hip, or chest waders in good condition
2. long rubber gloves.

Life jackets are required for work in boats or over water. Safety equipment may also include specially designed respiratory equipment and ear protection.

Product Risks

Petroleum products in, on, and around wildlife may present a hazard to human health and safety. Various components in certain petroleum products can damage skin, eyes, lungs, or the gastrointestinal tract (if ingested). Chronic and prolonged exposure may cause damage to the central nervous system and some cancers, such as skin cancer and leukemia. Fetal defects have been documented in laboratory animals. Individual risk factors such as pregnancy or history of liver disease should be taken into consideration in allowing volunteers and staff to work in contaminated areas. Personal hygiene must be stressed during the decontamination process. Protective measures should always be taken to avoid and minimize oil exposure throughout spill response activities.

Watercraft Safety

Airboats or boats propelled by outboard motors are effective for hazing waterbirds and for searching for sick or injured wildlife. Small, noisy, shallow-draft aluminum boats are particularly effective for hazing, and can be used as platforms for shell crackers during the day and for propane exploders or bright lights at night. Although relatively ineffective for herding diving birds, boats may be used for herding young or molting waterfowl that are incapable of flight.

Response personnel should ensure that all watercraft operations are conducted in accordance with local laws and regulations of the U.S. Coast Guard and OSHA, as well as any applicable internal agency regulations.

Response leader responsibilities should include the following:

1. Ensure that all workers who operate or work in watercraft have received first aid instruction in cardiopulmonary respiration.

2. Ensure that personnel who operate watercraft have completed a recognized boating or water safety course.

Each watercraft will be required to have personal protective equipment (personal flotation devices), firefighting equipment, and other safety equipment (distress signaling devices, bailing devices, and emergency position indicating radio beacons, running lights, radio, fog horns, navigational aids, anchor and anchor line), and undergo periodic inspections as required by USCG and OSHA regulations.

Aircraft Safety

Aircraft, especially helicopters, are effective in hazing migratory birds from large areas because of the combination of loud noise and rapid approach from above. Helicopters may also be used to herd flightless birds (young and molting birds). Aircraft can also be utilized for reconnaissance and transportation of personnel, equipment, and accessing injured wildlife.

Aircraft are considered to be especially useful during the early stages of cleanup and hazing operations. They are more effective if used in combination with other devices such as shell crackers and propane exploders. Because of their maneuverability and noise, helicopters are more effective than fixed-wing aircraft.

Established aviation safety programs and aircraft accident prevention programs within each organization will be complied with at sites at which such response measures are anticipated.

ATTACHMENT 5: WILDLIFE RESPONSE PLAN FOR CALIFORNIA

Note: A digital copy of the *Wildlife Response Plan for California* can be found at <http://www.dfg.ca.gov/Ospr/misc/wildlife.htm> and also in [RCP Appendix XXIIa](#) and [Appendix XXIIb](#).

**ATTACHMENT 6: BEST PRACTICES FOR MIGRATORY BIRD CARE DURING
OIL SPILL RESPONSE**

Note: A digital copy of the *Best Practices for Migratory Bird Care During Oil Spill Response* is available at:
http://www.fws.gov/contaminants/OtherDocuments/best_practices.pdf

**ATTACHMENT 7: INTERAGENCY MEMORANDUM OF AGREEMENT
REGARDING OIL SPILL PLANNING AND RESPONSE ACTIVITIES UNDER
THE FEDERAL WATER POLLUTION CONTROL ACT'S NATIONAL OIL AND
HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN AND THE
ENDANGERED SPECIES ACT (ESA MOA)**

Note: A digital copy of the *ESA MOA* is available at
[www.fws.gov/contaminants/FWS_OSCP_05/fwscontingencyappendices/O-
EndangeredSpecies/FinalMOA.doc](http://www.fws.gov/contaminants/FWS_OSCP_05/fwscontingencyappendices/O-EndangeredSpecies/FinalMOA.doc)

**ATTACHMENT 8: FISH AND WILDLIFE SERVICE OIL SPILL CONTINGENCY
PLAN**

Available on-line at:

http://www.fws.gov/contaminants/FWS_OSCP_05/FWSContingencyTOC.htm